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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/707,534

12/19/2003

Brett Rimmer

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08/07/2006

SCHLUMBERGER TECHNOLOGY CORPORATION
IP DEPT., WELL STIMULATION
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EXAMINER

FIGUEROA, JOHN J

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/707,534	Applicant(s) RIMMER ET AL.	
	Examiner John J. Figueroa	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The objections to the drawings and the specification (items 2 and 3 of the Office Action of February 27, 2006, hereinafter 'OA') have been withdrawn in view of Applicant's submission of new drawings and a substitute specification with the amendment/response filed May 22, 2006, hereinafter 'Response'.
2. The objections to the claims and the 35 USC 112 rejection of claims 3 and 5 (items 4 and 6 of OA) have been withdrawn in view of the amendment to the claims in Response.
3. The 35 U.S.C. 102(b) rejections as anticipated by United States Patent Number (USPN) 4,790,386 to Johnson, hereinafter 'Johnson', and by USPN 3,104,716 to Burkhardt (items 8 and 9 of OA) have been withdrawn in view of the amendment to the claims in Response.
4. The 35 U.S.C. 103(b) rejections (items 11-14 of OA) as unpatentable over Burkhardt; over Johnson and USPN 3,347,797 to Kuegermann, hereinafter 'Kuegermann'; over USPN 5,604,185 to Hen, hereinafter 'Hen,' and Burkhardt; and over USPN 6,387,986 B1 Moradi-Araghi, hereinafter 'Moradi' and Johnson, have been withdrawn in view of the amendment to the claims in Response.

Claim Rejections - 35 USC § 102

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3-5, 7, 9, 10 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,655,475 B1 to Wald, hereinafter 'Wald'.

Claim 1 (the sole independent claim) has been amended to limit the container to be able to have produced fluids flow through it and to be located in the path of a well bore's produced fluids.

Wald discloses a method for treating a well bore by using a treatment composition enclosed in a container deposited in a well through a drill string attached to a swivel (providing anchoring means for the container when connected to cable wire) and a rotary bit; said composition, when coming into contact with drilling mud and/or water (produced fluids), forms a solution that has the ability to circulate and treat the entire well bore. (Abstract; col. 1, lines 41-63; col. 2, lines 9-49; col. 5, lines 7-23 and lines 33-67; Figures 1 and 2) The container enclosing the composition is partially

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soluble and can be sized for placement in an elongated conduit inserted into a subterranean well, wherein said composition can be an anti-corrosive treatment in liquid or in particulate form. (Col. 1, line 64 to col. 2, lines 50-59)

Wald further discloses that the container may be rigid or flexible, can be partially soluble in the drilling mud (slow release of treatment composition) and may be formed with openings or pores filled with soluble plugs that are soluble in the mud thereby permitting flow of production fluids through the container upon contact with the enclosed liquid or particulate (encapsulated) composition. (Col. 2, line 41 to col. 3, line 7; col. 4, lines 25-30) The container may be introduced by pumping it or by using a cable/wireline that goes down through the drill string so that it can be located at, e.g., the bottom of a well bore. (Col. 4, lines 31-48)

Thus, the claims are anticipated by Wald.

8. Claims 1, 3-5, 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 4,846,279 to Bruce, hereinafter 'Bruce'.

The amendment to independent claim 1 has been discussed in the immediately preceding paragraph.

Bruce discloses treating a well bore by locating a canister at the bottom portion of a well bore, said canister (container) having a bladder that includes a chemical treating composition that flows into the production fluid by pressure differentiation, wherein the flow rate of delivery of the composition into the well can be controlled and predetermined. (Abstract; Figures 1 and 2; col. 2, lines 18-30 and 42-54) The canister with the bladder filled with a liquid scale inhibitor fluid can be lowered into the well

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bore's production zone by using a wire line, said canister made from stainless steel, titanium or similar materials that can withstand the physical stresses to which it is exposed and resist attack from corrosive well fluids (so that it can be reused) and thus perform satisfactorily during its entire design life. (Col. 2, lines 51-54; Col. 3, lines 4-40; col. 4, lines 40-59)

Bruce further discloses that the bottom of the canister may contain *at least one* aperture, on its bottom wall or on its side, through which the well fluid can enter thereby, subjecting the inner bladder to the fluid pressure existing at the bottom portion of the well. (Col. 3, lines 41-62) The flow rate can also be severely restricted allowing for the canister to be located at a higher point in the well bore and thus, anchored alongside the sidewall of the well bore. (Col. 4, lines 60 to col. 5, line 2; col. 5, line 55 to col. 6, line 25; Fig. 2)

Thus, the claims are anticipated by Bruce.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wald or Bruce, either in view of Johnson.

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Wald and Bruce were discussed above in paragraphs #7 and #8, respectively. Johnson was discussed previously in item 8 on page 5 of OA and the arguments therein regarding the instant claims are incorporated herein in their entirety.

Neither Wald nor Bruce discloses the container being a “meshed or mesh-like” container. Nor do Wald or Bruce expressly disclose the specific chemical inhibitor to be included in the treatment composition.

Johnson further teaches that an open mesh screen can be attached over an opening/aperture of the container if necessary to restrain the treatment composition against its movement out through an opening or aperture of the container. (Col. 5, lines 20-27) Johnson also teaches that among the well-known scale inhibitors and anti-corrosion chemicals are those comprising alkaline salts of phosphate, phosphates, acrylates, sulfonates and polymeric acrylic solutions.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to attach a mesh screen over at least an aperture or opening of the container in Wald or canister in Bruce. It would have been obvious to do so to prevent spilling of the treatment fluid composition of scale/corrosion inhibitors (such as those disclosed in Johnson) and/or to reduce the flow rate of the fluid composition to attain a more effective treatment distribution of the well bore's metal surfaces as taught by Johnson.

Thus, the claims as amended are unpatentable over Wald or Bruce, either in view of Johnson.

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11. Claims 4, 6, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burkhardt in view of Bruce.

Burkhardt was discussed previously in item 9 on page 6 of OA and the arguments therein regarding the instant claims are incorporated herein in their entirety. Burkhardt does not disclose a container having production fluids flow through it.

Bruce was discussed above in paragraphs #8.

Bruce teaches that, regardless of the embodiment used, the canister provides a simple, reliable and inexpensive fluid introduction device which allows for the well to actuate the flow (thus, not requiring outside control); thereby, providing for introduction of treatment fluid over a relatively long period of time. (Col. 2, lines 8-16; col. 6, lines 11-25)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time that the claimed invention was made to use Bruce's canister in Burkhardt's method of treating liquids in a well bore. It would have been obvious to do so to attain a resultant well bore treatment delivery system that can provide a treatment composition in an efficient, inexpensive manner over a relatively long period of time as taught by Bruce.

Thus, the claims as amended are unpatentable over Burkhardt and Bruce.

12. Claims 2 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moradi in view of Bruce.

Moradi was discussed previously in item 14 on page 9 of OA.

Moradi discloses encapsulated crosslinking agents and gel-forming compositions to be utilized in oil-field applications. (Abstract; col. 2, lines 23-26) The preferred polymers taught by Moradi to be used for encapsulation are homopolymers and copolymers of glycolate and lactate, polycarbonates, polyanhydrides, polyorthoesters and polyphosphacenes; wherein the most preferred is poly(lactic acid-co-glycolic acid). (Col. 3, lines 12-17) According to Moradi, these polymers are preferable because they can degrade over a period of time to release the crosslinking agent at a selected gradual rate. (Col. 3, lines 7-10)

Moradi does not disclose an explicit system for delivering the composition into a well bore.

Bruce was discussed above in paragraphs #8 and 11.

Accordingly, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the method of delivery a treatment composition taught by Bruce to deliver Moradi's encapsulated polymer composition into a well bore production tubing. It would have been obvious to skilled in the art to do so to effectively reduce the scaling/corrosion of the well bore production equipment/reservoir by the optimal, inexpensive and simple delivery of Moradi's encapsulated polymer composition over a preferred, gradual length of time as taught by Bruce.

Thus, the claims as amended are unpatentable over Moradi and Bruce.

Response to Arguments

The Objections to the Claims and Specification (items 2-4 on pages 2-4 of OA)

13. Applicant's arguments filed regarding the specification and claim objections have been considered but have become moot due to these objections having been withdrawn.

The 35 U.S.C. 112 Rejection (items 6 on page 4 of OA)

14. Applicant's arguments filed regarding the 35 U.S.C. 112 rejection have been considered but have become moot due to the withdrawal of this rejection.

The 35 U.S.C. 102 Rejections over Johnson and Burkhardt (items 8 and 9 on pages 5 and 6 of OA)

15. Applicant's arguments filed regarding the 35 U.S.C. 102(b) rejections as anticipated by Johnson, and as anticipated by Burkhardt, have been considered but have become moot due to the new grounds of rejection.

The 35 U.S.C. 103 Rejection over Burkhardt (item 11 on page 7 of OA)

16. Applicant's arguments filed regarding the 35 U.S.C. 103(a) rejection of claim 8 over Burkhardt have been considered but have become moot due to the new grounds of rejection.

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The 35 U.S.C. 103 Rejection over Johnson and Kuegermann (item 12 on page 8 of OA)

17. Applicant's arguments filed regarding the 35 U.S.C. 103(a) rejection of claims 3 and 5 over Kuegermann have been considered but have become moot due to the new grounds of rejection.

The 35 U.S.C. 103 Rejection over Hen and Burkhardt (item 13 on page 8 of OA)

18. Applicant's arguments filed regarding the 35 U.S.C. 103(a) rejection of claims 10-12 over hen and Burkhardt have been considered but have become moot due to the new grounds of rejection.

The 35 U.S.C. 103 Rejection over Moradi and Johnson (item 14 on page 9 of OA)

19. Applicant's arguments filed regarding the 35 U.S.C. 103(a) rejection of claims 13-15 over Moradi and Johnson have been considered but have become moot due to the new grounds of rejection.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

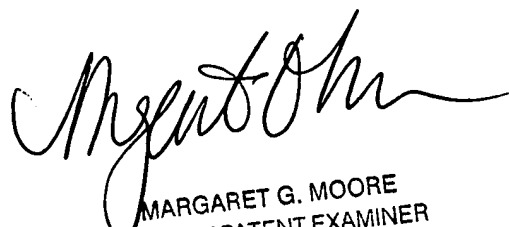
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571) 272-8916. The examiner can normally be reached on Mon-Thurs & alt. Fri 8:00-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJF/RAG



MARGARET G. MOORE
PRIMARY PATENT EXAMINER
ART UNIT 1712